### Introduction

Three reports issued by the Institute of Medicine (IOM) and the National Academy of Sciences (NAS) since 1989 have recommended that research institutions develop educational programs to promote the responsible conduct of research. In 2002, the IOM report, Integrity in Scientific Research: Creating an Environment that Promotes Responsible Conduct, recommended that "institutions should implement effective educational programs...guided by basic principles of adult learning" to develop the "abilities that give rise to the responsible conduct of research."

In 1992, the NAS report, Responsible Science: Ensuring the Integrity of the Research Process, recommended that "scientists and research institutions should integrate into their curricula educational programs that foster faculty and student awareness of concerns related to the integrity of the research process." In 1989, the IOM report, The Responsible Conduct of Research in the Health Sciences, recommended that "universities should provide formal instruction in good research practices."

In addition, the Commission on Research Integrity report, Integrity and Misconduct in Research (1995), recommended "a change in the existing institutional misconduct assurance to require educational programs on the responsible conduct of research for recipients of PHS research grants and all researchers, students, fellows, research technicians, and others supported by these grants." The 1989 PHS regulation on institutional responsibilities for responding to allegations of research misconduct (42 CFR Part 50, Subpart A) requires institutions to "foster a research environment that discourages misconduct in all research...for which PHS funds have been provided or requested."

### **Background**

To facilitate the development of the recommended educational programs the Office of Research Integrity (ORI) created the RCR Resource Development Program in FY 2002 to partially support the creation of advanced RCR instructional materials by the research community that may be used by various institutions and organizations receiving research funds from the Public Health Service (PHS).

## Scope of Work

- 1. The contractor will produce one of the following RCR products for ORI:
  - A computer-based application including:
    - o Interactive courses or modules
    - o Intellectually engaging exercises
    - o Case studies using decision-tree technology
    - Skill or competency development programs
  - A high quality, educational or training video
  - Online quizzes
  - Interactive games
  - Assessment tools to evaluate RCR programs or RCR education courses.

Projects should address one of the nine core instruction areas of the RCR or other related topics which are reasonably justified, such as handling of waste materials or financial responsibilities. Below are the specific areas of interests:

- a) Research misconduct (Highest Demand)
- b) Collaborative science (High Demand)
- c) Peer Review (High Demand)
- d) Data acquisition, retention, storage, custody, sharing, ownership, interpretation, and reporting (High Demand)
- e) Publication practices and responsible authorship (Moderate Demand)
- f) Mentor/trainee responsibilities (Moderate Demand)
- g) Animal subjects (Moderate Demand)
- h) Conflicts of interest (Low Demand)
- i) Human subjects (Low Demand)
- j) Other Areas of Interest (High Demand)
  - Educational resources & tools for Research Administrators.
  - Assessment tools to evaluate current RCR education programs
  - Assessment tools to evaluate institutional RCR Policies.
- 2. The contractor is expected to attend the RCR Expo 2006 to view similar RCR products.
- 3. Upon completion, the contractor is expected to participate in the ORI-sponsored RCR Expo 2007.

### Requirements

- 1. The final product(s) must meet the following requirements:
  - a) Have significant relevance to PHS funded research.
  - b) Actively engage the user.
  - c) Easily distributable to the research community for free or at minimum charge (e.g., shipping & handling, reproduction costs). Products which are not easily distributed via Internet (e.g., CDs, videotapes) should include a description of an effective distribution plan.
  - d) Have clearly stated learning objectives and/or goals.
  - e) Capable of operating as a stand-alone product. Projects which will add to an existing product or website will need approval from the project officer before submission.
- 2. Products should target one or more of the following audiences: graduate students, novice researchers, advanced researchers, research administrators, department heads, post-docs, clinical staff, international researchers/post-docs, technicians and/or other personnel who are involved with research. Other targeted audiences may be considered with justification.

### Other Considerations

What will NOT be supported:

- 1. Projects producing introductory level RCR learning materials.
- 2. Projects fully funding or partially funding training, continuing education, or tuition reimbursement for project directors, research assistants, or other staff.
- 3. Projects requiring WebCT, Blackboard, Desire2Learn or other proprietary technology which may limit distribution or functioning of the final product.
- 4. Projects solely relying on PowerPoint presentations or PowerPoint-like presentations that are limited to information transfer.
- 5. Projects fully funding or partially funding conferences, workshops, or a one-time course.

# **Deliverables/Payment Schedule**

<u>Deliverables</u>	<b>Payment</b>	<b>Due Date &amp; Payment Date</b>
1. Conference call with project officer		By 09/30/05
2. Outline of contents		09/30/05
3. Final project plan with Detailed	\$10000	09/30/05
Timeline		
4. Attendance at the RCR Expo 2005	\$750	10/26/05
4. Prototype of product		01/15/06
5. 1 <sup>st</sup> Progress Report	\$4500	01/15/06
6. Rough drafts of all work		04/01/06
7. 2 <sup>nd</sup> Progress Report	\$4500	04/01/06
8. Rough drafts of all work		07/01/06
9. 3 <sup>rd</sup> Progress Report		07/01/06
10. The final product in .zip format, CD-	\$4500	09/01/06
ROM, DVD.		
11. Final Report		09/01/06
12. Exhibition at the RCR Expo 2006	\$750	10/26/06

## **Tasks**

# Task 1: Planning

Subtask 1.1	Prepare draft project plan
Subtask 1.2	Revise draft project plan
Subtask 1.3	Submit final project plan

# Task 2: Create RCR Product

Subtask 2.1	Create core content
Subtask 2.2	Create user interface
Subtask 2.3	Conduct pilot tests

# Task 3: Review of project by ORI

Subtask 3.1	Submit Deliverable #5 for review
Subtask 3.2	Submit Deliverable #7 for review
Subtask 3.3	Submit Deliverable #9 for review
Subtask 3.4	Submit Deliverable #11 for review

# Task 4: Finalize Project

Subtask 4.1	Revise project pending ORI feedback
Subtack 12	Submit final project to ODI

# Task 5: Participate in the RCR Expo

Subtask 5.1	Attend RCR Expo 2005 to view similar completed products
Subtask 5.2	Attend and exhibit the final product at the RCR Expo 2006

# Transmittal/Delivery/Accessibility

The contractor shall provide one electronic version of each deliverable via email, CD-ROM, DVD, or hard copy

#### **Funds Available**

ORI has committed \$250,000 in FY 2005 to fund 10 projects. More projects will be supported if funds are available. Funding for each project is limited to \$25,000 in direct costs; indirect costs are not paid. The cost of travel to the RCR Expo 2005 and the RCR Expo 2006 should be considered in the budget. Travel costs to each Expo should not exceed \$750 per trip (maximum \$1500 for both).

## **Eligibility**

Eligibility is limited to profit or non-profit institutions and organizations within the United States.

### **Submission Deadline**

Submission deadline is February 25, 2005. Award notification will be made in May 2005.

### **Funding Mechanism**

The projects will be funded through purchase orders. This is not a grant program.

### **Period of Performance**

Period of performance will be from Sept 1, 2005 to Oct 30, 2006. Longer periods of performance may be approved when appropriate.

### **Submitting a Proposal**

Contractors must provide the following information listed below in a Microsoft Word document.

- Name, email, phone of Project Director
- Name, email, phone of authorizing institutional official
- Name, address, phone and fax of applicant institution
- Project title
- Project abstract 150 words maximum
- Project description 3 pages maximum
- Budget I page with breakdown
- Qualifications of Project Director and team members 1 page.

### Ownership and Copyright

The Federal Government shall acquire unlimited rights in data and software produced in the performance of this contract. All institutes and individuals will be granted unlimited use of all data and software products. This is essential to achieve the goals of the RCR Resource Development Program and is not negotiable.

## **Review Criteria**

Applications which meet the RCR Resource Development Program goals and project requirements will be peer reviewed. Proposals which receive high ratings in peer review will undergo an internal review at ORI for the final decision. ORI will consider the demand for proposed products when making the final decision (see "Areas of Interest" section for demand).

Questions concerning the feasibility & quality of the proposed product include:

- Can the plan be executed in the time allotted?
- Do the personnel have the needed expertise?
- Is the budget appropriate?
- Is the proposed product clearly described?
- Does the product adequately cover an RCR topic?
- Is the proper format being utilized?
- Is appropriate technology employed?
- Does the product engage the user in active learning/participation?
- Are there plans for pilot testing the materials?
- How will the product improve the skills, abilities, and competencies of the target audience?
- Is the final product likely be used by others?

Questions concerning the significance of the application include:

- Does the product fill a gap in RCR resources?
- How does the proposed product compare with existing products?
- Is the instructional material likely to be effective?
- Can the instructional material be easily used?
- Can the material be used to instruct a broad range of research personnel?
- Can the instructional material be used by a broad range of institutions?
- Can the instructional material be easily distributed for free or at minimal cost?

### **Project Officer**

Loc Nguyen-Khoa@osophs.dhhs.gov Telephone: (301) 443-5300

Fax: 301-443-5351